

ABSTRACT

A flexible catheter having a guidewire lumen extending throughout its length and a distal section that is insertable, over the guidewire, into a patient's vasculature for removing obstructive material, comprising an inner tube nested in an outer tube with an unobstructed void defined between them that is connectable to negative pressure, the inner tube is preferably rotatable by a motor for reducing the frictional resistance to the sliding of the inner tube over the guidewire as well as for reducing the frictional resistance to the movement of obstructive material through the void,

the distal section of the catheter consists essentially of the distal portions of the tubes, wherein the inner tube has no connection to any element for cutting or fragmenting the obstructive material thereby reducing the likelihood of dislodging the material prior to aspirating it into the void.